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POULTRY HOUSES FOR TEXAS

Issued By
The Extension Service
Agricultural and Mechanical College of Texas and
The United States Department of Agriculture
O. B. Martin, Director, College Station, Texas

Poultry Houses for Texas

M. R. Bentley and E. N. Holmgreen

Consult your county or home agent before building or remodeling a poultry house. They can advise regarding any slight modification that may be needed to suit a particular section.

While the Extension Service has detailed blue prints of all plans shown in this bulletin, the supply of these prints is not sufficient to comply with requests for complete sets. Select the type and size of the house from this bulletin and the blue print for that house will be sent upon request.

Hens should be housed. Other conditions being right, they pay good interest on a reasonable investment in their comfort. In winter especially, egg production is in direct proportion to the degree of comfort given the flock. Haphazard housing and management seldom return a profit on labor and investment. If poultry production is to be an important part of the farm business and a real source of income a good poultry house will be a paying investment.

A good poultry house is not necessarily an expensive one. Frills, costly interiors, designs calling for expensive finish work, and fancy patented features pay no dividends.

The plans shown herein are those found most successful and best adapted to Texas farm conditions.

Essentials of a Good House

There are many sheds, old poultry houses and other buildings which can be converted into good poultry houses at small cost and with little labor. The essentials in any type of poultry house are: **Dryness, ventilating doors placed to allow good ventilation, freedom from drafts in cold wet weather, sunlight, labor saving arrangement and sufficient floor space to allow the flock freedom and comfort.** Any house that meets these requirements should prove satisfactory.

Location

Drainage is positively the most important factor in the location of a poultry house. Poorly drained locations result in cold, damp quarters, which in turn lead to poor production, sickness and disease. In remodeling old buildings it is often found advisable to move them to better locations. The house should face the south to permit the greatest amount of sunlight to enter. This is especially important during the winter when sunlight is most needed.

Floor Space

The number of square feet of floor space per bird is a most important factor. Crowded houses sooner or later lead to a diseased flock.

From three to four square feet of floor space should be allowed for each bird where the flock is kept under close confinement.

From two and one-half to three square feet of floor space per bird is sufficient under average Texas farm conditions, or where adequate range is provided. However, never figure on less than two and one-half square feet of floor space per bird.

Construction of Houses

Foundation

The life of a building is determined by the kind of foundation it has. Foundations made from material that decays, often ruin otherwise good buildings.

The use of a concrete foundation lends stability and permanence to the poultry house. Moreover, concrete foundation walls prevent rats and other predatory animals from getting under the floors. The foundation walls should extend 6 to 8 inches above the ground line. Figure No. 1 shows the details of a good foundation.

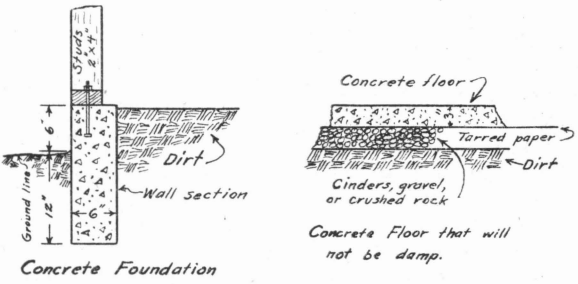


Fig. 1

Figure No. 2 shows how to rat-proof poultry houses or other buildings that are already constructed and which do not have the advantage of concrete foundation walls.

Floors

Poultry houses must have dry floors. Ease of cleaning and sanitation are other essentials. Concrete, dirt or wood may be used. The floor should slope about two inches toward the front to keep the litter well distributed and prevent its being scattered to the back of the house. All floors should be covered with litter. When so covered most of the filth, feathers, and droppings are collected in the litter, making house cleaning easier and sanitation better.

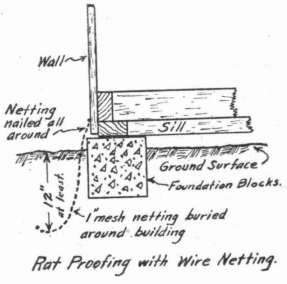


Fig. 2

Concrete—

Concrete floors are generally recommended because they are permanent, easy to clean, rat-proof and impervious to vermin. This kind of a floor will be warmer and dryer if underlaid with a layer of cinders or small stones as indicated in Figure No. 1.

When the house has concrete foundation walls, a dirt floor may well be used for a year or more and the concrete floor added later when the flock pays for it.

Dirt—

Dirt floors made of clay, wetted and well tamped will be found satisfactory. If the dirt floor is used for several years a two inch layer may be removed every two years and replaced with clean soil. Oiling the floor with crude oil will prevent dustiness. The oiling should be done with no chickens in the house. Dirt floors should be raised several inches above the outside ground level.

Wood—

Wood floors are recommended for brooder houses, though their use in laying houses is not popular. They should be made of tight fitting lumber such as shiplap or cheap flooring to avoid cracks as much as possible. Wood floors should be raised at least 8 to 10 inches above the ground. Floors close to the ground make rat harbors and soon rot out.

Walls

Drop siding nailed to 2x4 studs is used a great deal for walls. Another wall that is cheaper in some localities is made with 1x12 boards run vertically, with the cracks stripped with 1x4's, or other battens, or a very good wall can be made by running shiplap vertically, while an extra tight wall can be made with car siding. When the wall boards are run vertically most of the studs may be left out. In sections of Texas where driving snow is a problem, snow-tight walls can be made by stuccoing over a reasonably tight lumber wall or by covering the wall with composition roofing.

Concrete, stone, hollow tile or adobe may be used in some sections, though their cost should be considered. Concrete or stone walls may be damp in the southeastern part of the state.

Roof

Corrugated iron is the most satisfactory roofing material. It is lasting, vermin proof and as cheap as any good roofing. While galvanized iron as a roofing material has advantages which warrant its use on poultry houses, it has the disadvantage of being hot when the sun shines on it.

This disadvantage has been overcome to a large extent in the design of the houses shown in this bulletin by placing the roof twelve to eighteen inches higher, or farther from the birds, than other roofings are usually placed. At the same time ample ventilation is given the houses which tends to overcome the heat radiation from the metal roofing.

Corrugated iron roofing should have more than one corrugation side lap. The most common type of this iron has both edges turned the same way. A good lap may be obtained with this type of sheet by turning alternate sheets upside down as shown in Figure No. 3. This method

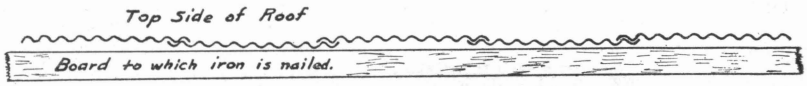


Fig. 3. An Economical Method of Getting a Good Side Lap with the most Common Type of Corrugated Iron.

effects some saving in roofing. Always lap the iron so that the exposed edges turn down in the troughs of the sheets under them, regardless of the type of iron used. Allow at least 6 inches end lap.

Shingles can be used on poultry houses that have a roof pitch on ¼ (6 inches to 1 foot). They are not satisfactory if the roof pitch is less. A good grade of roll rofing over solid shiplap sheathing will also serve.

Roosts

Good roosts and dropping boards save considerable labor and aid in house sanitation.

The roosts should be placed at the back of the house away from the front opening. Two by two material slightly rounded on the upper side and set 12 inches apart, makes excellent roosts. They may run either lengthwise or across the dropping board, and should be 6 inches above it. Roosts should be made in sections not more than 12 feet in length and such sections hinged at the back of the house to facilitate celaning.

If 2-inch poultry netting is put just under the roosts all droppings will fall through, while the birds will be prevented from getting at them. This materially aids in preventing worm infestations and disease outbreaks.

All poultry houses should have dropping boards under the roosts. Make the dropping boards of close fitting material about 2½ feet from the floor and extend forward as much as 6 inches from the front roost. Run the lumber in the dropping boards perpendicular to the back wall so that is will be easy to clean.

One of the very best investments in the whole poultry house is the money expended for a sufficient amount of carbolineum with which to thoroughly paint the roosts and dropping boards. Mites and blue bugs

will positively not harbor in places painted with this substance and its repelling effects last several months. It is also an excellent wood preservative.

The carbolineum should be applied as the roosts and dropping boards are put together so that all cracks and joints will be thoroughly penetrated.

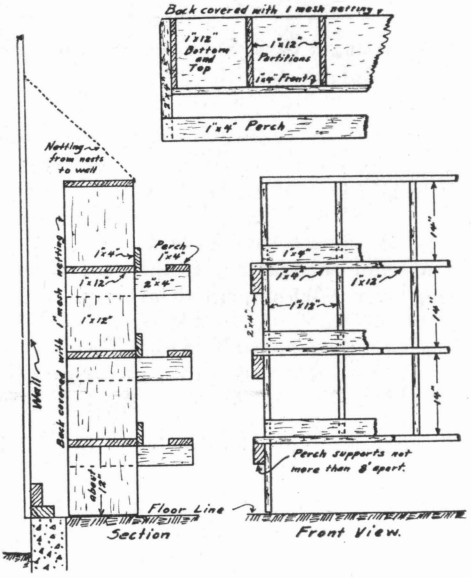


Fig. 4. Nests. Three Piers High

Nests

Supply one nest to each 5 hens. Nests may be placed at the end walls or partitions, several tiers high. Figure No. 4 gives details of construction.

Treat the nests with carbolineum.

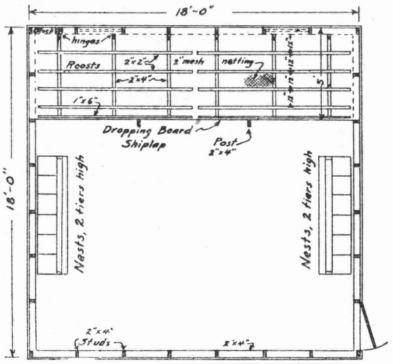
Small Shed Roof House

For 65 to 70 hens. Blue Print No. 167
For 100 to 125 hens. Blue Print No. 168

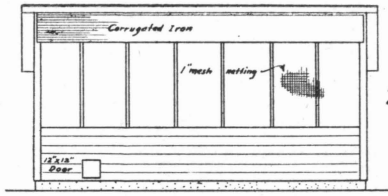
This is an excellent type of house for the small flock owner. Two designs are available, the features of which conform to the large shed roof house described in detail on page 10. The 14x14 foot house is suitable for about 70 hens and the 18x18 foot house for 100 to 125 hens.

The houses are small, yet of sufficient size for the rated capacities. They are inexpensive, easily built and well ventilated. In the 14x14 foot house the windows in the back are optional.

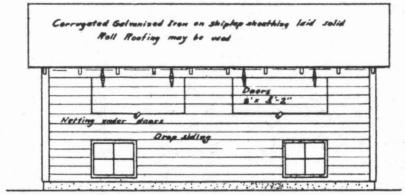
Where these houses are constructed in Northwest Texas the same suggestions offered on page 10 should be observed.



Floor Plan Scale ½"=1'

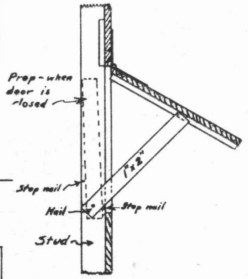


South Side Scale ½"=1'

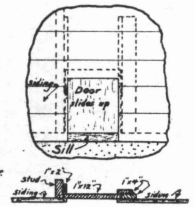


North Side Scale ½"=1'

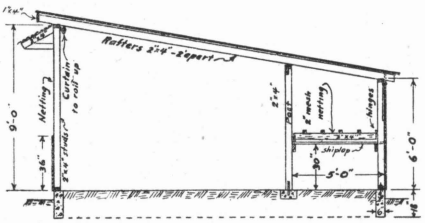
No openings in north, in northwest Texas



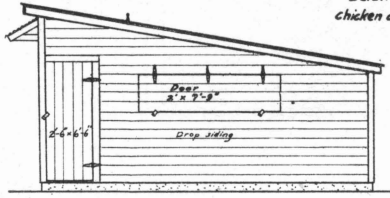
Detail of a prop for ventilating doors.



Detail of chicken door.



Section Scale ⅛"=1'



East End. Scale ½"=1'

West, same except for entrance door.

Cooperative Extension Work in Agriculture and Home Economics
A & M. College of Texas and U. S. Department of Agriculture cooperating.
O. B. Martin, Director College Station, Texas

SHED ROOF POULTRY HOUSE

18'x18' for 100-125 hens.

1 sheet Serial No. 168

MRB 8119-5

Fig. 5

7

Range Shelter for Poultry

Blue Print No. 170

A design of a range shelter might vary considerably from this plan and still serve as well. The chief requirements are that the shelter have a good roof to protect the fowls from rain, and furnish a shade, and also a complete netting covering to keep out varmints. The building has no floor but netting over the roost poles prevents the entrance of

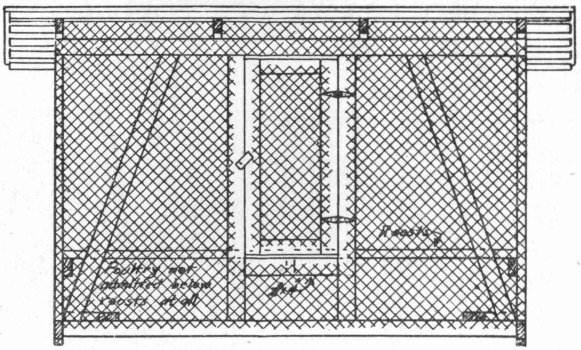


Fig. 6. Range Shelter

varmints from below. The space below the roosts is closed, so that the birds cannot get into it. Netting only is used on all four sides.

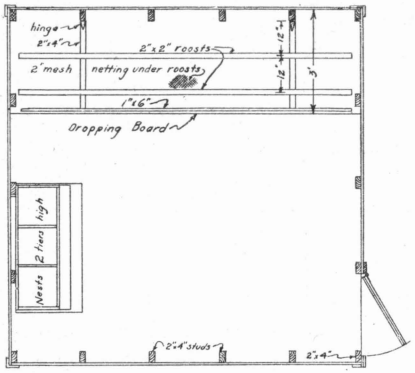
A galvanized iron roof is suggested on account of its durability.

This plan is 10x10 feet in size. The front is six feet, and the back is five feet high. The roosts are two feet off the ground.

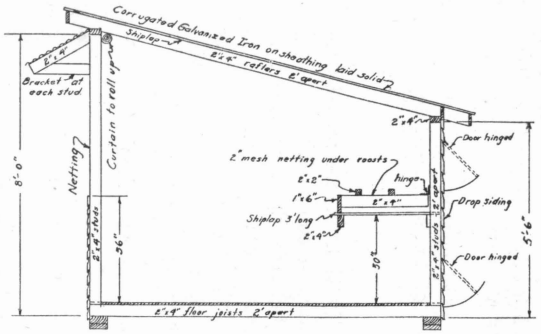
Back Yard Poultry House

For 25 hens. Blue Print No.86.

This house is for the back yard flock of about 25 hens. It is also an excellent house for the breeder in trap nesting and pedigree breeding. The house is built on skids to be moveable, though when set the skids should be raised off the ground to avoid their rotting. A wood floor is used in this house. It is designed to furnish ample ventilation for use in the warmer parts of the state, and is about the same house that is used in the Texas Egg Laying Contests.

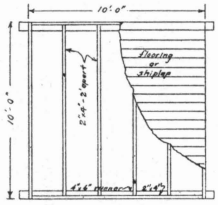


Floor Plan Scale ½"=1'
10'x10'

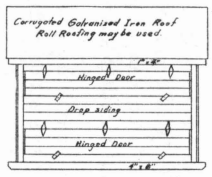


Section Scale ½"=1'

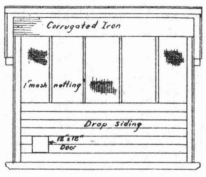
Fig. 7



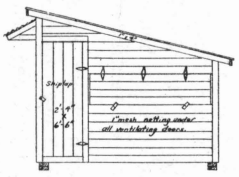
Floor Framing Scale ¼"=1'



North Side Scale ¼"=1'



South Side Scale ¼"=1'



East End Scale ¼"=1'
West - Same except entrance door

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A. & M. College of Texas and U. S. Department of Agriculture cooperating
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SHED ROOF POULTRY HOUSE
10'x10' For 25 Hens.

MAR-G 3119-6 ©sheet Serial No. 86
Revised

Large Shed Roof House

For 200 to 250 hens. Blue Print No. 120

This house shown in Figure No. 8 is the most popular farm poultry house in Texas. Its simple shed type construction makes it easy to build and the cost per hen capacity is as low as any good poultry house. The house is well ventilated and admits a maximum of light.

The design shown is one built of 1x12 boards run vertically with cracks stripped with battens. Framing of 2x4's is used around doors, front and wherever necessary.

For Northwest Texas.—An especially tight house may be made by using shiplap for walls covered with stucco or composition roofing. The roof should have heavy building paper between the corrugated iron and the sheathing, and the ventilating doors should be omitted. The windows may be left to admit light under the dropping board. The open front may be used as indicated. The curtain over the open front will close the house tight enough even in the most severe weather.

All ventilating doors and removable windows should have one-inch mesh netting under them.

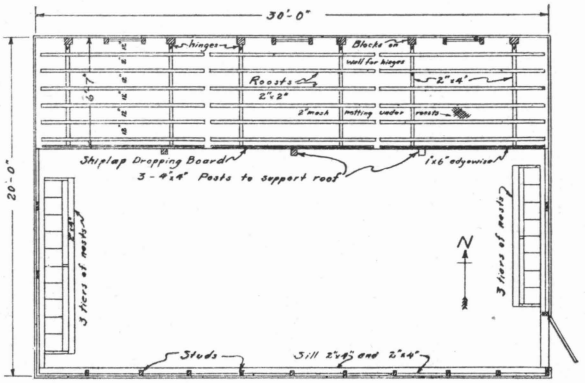
The weather shield or narrow shed roof on the front of this and all other shed roof houses in this bulletin may be put on after the building is completed. The brackets are toe-nailed to the studs. Strips of corrugated sheet iron run lengthwise without sheathing under them make an economical weather shield.

A second-hand iron pipe makes an excellent curtain rod. Nails spaced along the studs will allow adjustment of the height of this roll.

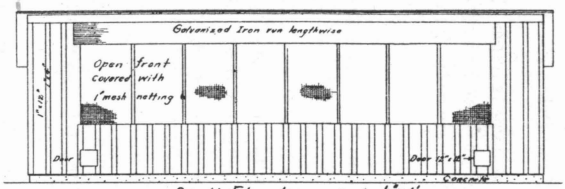
A house 20 feet wide is most desirable and if the capacity is to be increased it should be done by lengthening the house as follows:

For 260 to 325 hens—house 20x40 feet.
For 325 to 400 hens—house 20x50 feet.
For 400 to 500 hens—house 20 60 feet.

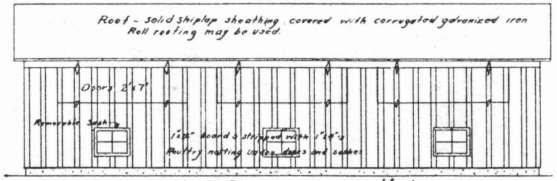
These longer houses can be built exactly in accordance with this plan (blue print No. 120.) except for length, with the following additions; Place a window under the dropping board each 10 feet. Put in partitions from the dropping board to the roof, each 20 feet to avoid side drafts. Canvas or lumber may be used for partitions.



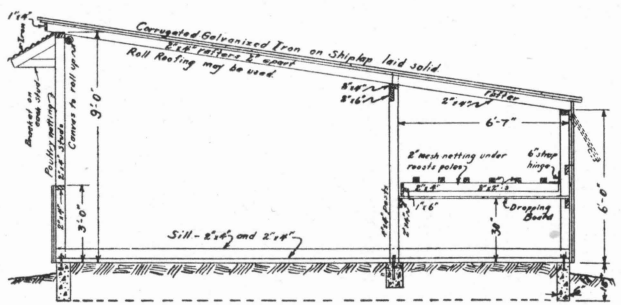
Floor Plan Scale ¼"=1'



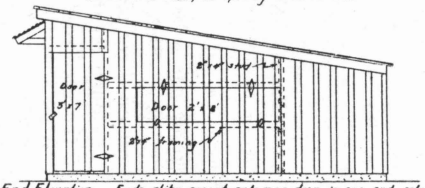
South Elevation Scale ¼"=1'



North Elevation Scale ¼"=1'
In northwest Texas, no opening in north side.



Section Scale ⅜"=1'



End Elevation: Ends alike except entrance door in one end only
Scale ¼"=1'

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SHED ROOF POULTRY HOUSE
For 200 to 250 hens. 20'x30'
Serial No. 120 Revised
Blueprint

Fig. 8

Gable Roof House

For 200-250 hens. Blue Print No. 113.

The house shown in Figure No. 9 is a gable roof type giving the advantage of a straw loft, which makes it cooler in summer and warmer in winter. This plan may be used in remodeling old gable roof buildings into excellent poultry houses.

For Northwest Texas.—No openings are advised for the north side, and the house can be made snow-tight in the same manner as advised for the shed type.

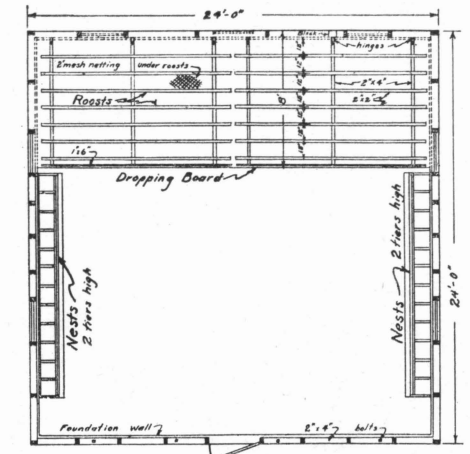
The south gable has a baffle or louver boards, while the north side has a ventilating door which can be closed. The house has ventilating doors and windows on three sides with the open front to admit plenty of light and air. The open front has a roll curtain which can be adjusted as in the case of the shed roof.

The ceiling joists serve to tie the rafters together and strengthen the roof. Slats, wire or 1x4's nailed on the upper edge of these ceiling joists supply the straw in the loft.

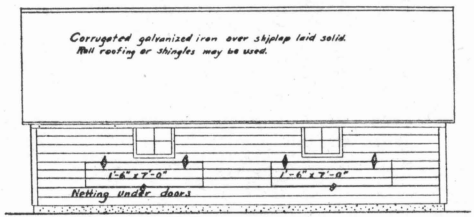
Houses with roof span of more than 20 feet should have supporting posts for ceiling and roof, while those smaller need these posts only if straw is actually used in the loft or if it is used for storage purposes.

With exactly the same design the size may be varied for different capacities:

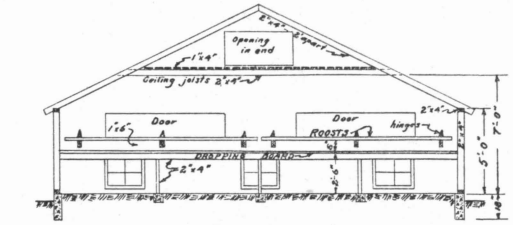
For 100 to 125 hens—house 18x18 feet.—Blue Print No. 116.
For 300 to 350 hens—house 30x30 feet.
For 500 to 600 hens—house 30x50 feet.



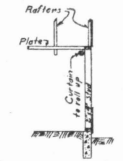
Floor Plan Scale ¼"=1'



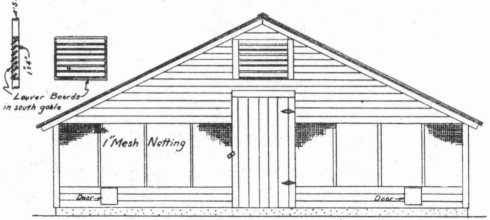
East and West Elevation



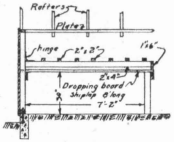
Section Scale ¼"=1'



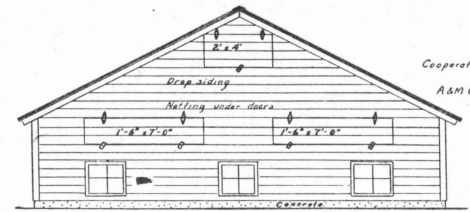
Part Section at Front Scale ¼"=1'



South Elevation Scale ¼"=1'



Part Section at Roosts Scale ¼"=1'



North Elevation Scale ¼"=1'

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O.B. Martin, Director College Station, Tex

24' x 24'
Square, Gable Roof
POULTRY HOUSE
for 200-250 hens

@ sheet Serial No. 113
Revised

3119-5 mcsb

Fig. 9

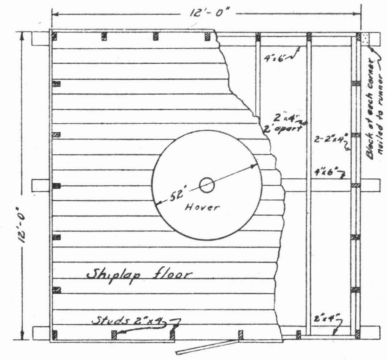
Brooder House

500 chicks. **Blue Print No. 166.**

This 12x12 foot, moveable brooder house is designed for a 500 chick unit. It has a sufficient number of ventilating doors so that it can be used both as a brooder and as a summer shelter to grow out the pullets. During the early brooding season the back and side doors are to be closed tight. If the doors have been abused and do not close tightly, a layer of building paper over them on the inside will seal the house tight enough for early brooding. The two front ventilating doors are opened up flat against the wall and fastened during the brooding season. These two openings are then covered with glass substitute on frames. The glass substitute is used to admit light and at the same time prevent drafts. Later in the season when the chicks are larger these glass substitute frames are removed and the house is opened up. Instead of solid sheathing under the corrugated iron roof the house is ceiled with fiber board. Ventilation during the brooding season may be adjusted by the hinged six-inch board at the ceiling in front. This ventilator allows air to escape between the rafters at the front of the house.

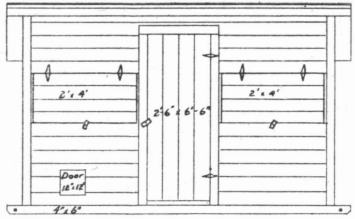
A tight shiplap floor is provided. The house is mounted on three 4x6 runners. When the brooding season is over the house may be moved to a good range, the ventilator doors opened and the house used through the summer as a pullet range house.

The wickless types of oil brooders are less of a fire hazard. If a wick type is used they should be thoroughly cleaned, carefully watched and adjusted between each brood. Brooders should not be used at more than ½ their rated capacity. For 500 chicks a 52-inch hover should be the minimum size.

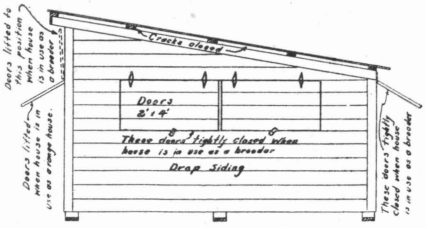


Floor Plan Scale ⅜"=1'

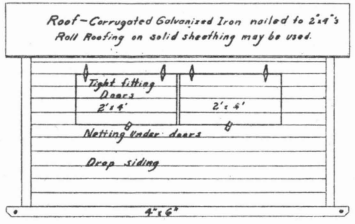
This House should have some braces set diagonally between studs, if it is to be moved about considerably.



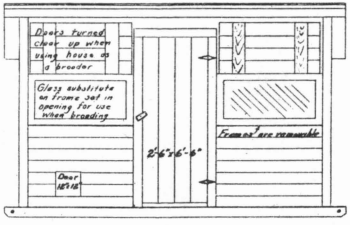
South Side Scale ⅜"=1'



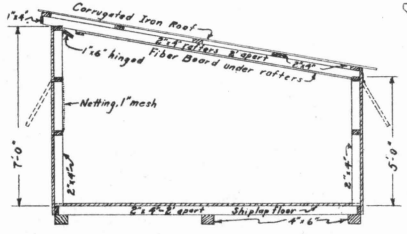
East and West End (same) Scale ⅜"=1'



North Side Scale ⅜"=1'



South Side, fixed for brooding chicks
Scale ⅜"=1'



Section Scale ⅜"=1'

Fig. 10

Cooperative Extension Work in Agriculture and Home Economics
A. & M. College of Texas and U. S. Department of Agriculture cooperating
O. B. Martin Director. College Station Texas.

12'x12' BROODER HOUSE
AND
RANGE HOUSE

For 500 chicks. Use 1000-chick size hover.
① sheet Serial No. 166

3119-5

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